

Attorney Docket No. SIC-04-033

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

TATSUYA KAWAKAMI

Application No.: 10/711,702

Filed: September 30, 2004

For: BICYCLE SHIFT DEVICE HAVING A
LINEARLY SLIDING SHIFT LEVER
OPERATED BY A PIVOTING
INTERFACE MEMBER

Examiner: Vinh Luong

Art Unit: 3656

PRE-APPEAL BRIEF
REQUEST FOR REVIEW

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Commissioner:

Applicant requests review of the final rejection dated July 8, 2009 in the above-identified application. A Notice of Appeal accompanies this request.

Claims 25 and 26 stand rejected under 35 U.S.C. §112 as failing to comply with the written description requirement. The dispute centers around the limitation “wherein, when the device is oriented such that the rotational axis (X) is vertical, the pivot axis (P) extends at least in part in a vertical direction” as recited in claim 25. This limitation was added to instruct one of ordinary skill in the art how to determine infringement.

As an initial matter, the claims in this application are intended to cover one or more of the embodiments shown in Figs. 8-11 and described at paragraphs [0025]-[0028]. Those embodiments are an improvement over the prior art device shown in Figs. 1-7. As stated at the beginning of paragraph [0025], “[w]hile operating tab 202 pivoted around a pivot axis (P) that was substantially parallel to the handlebar axis (HB) in the above embodiments, the pivot axis (P) could be inclined relative to the handlebar axis (HB) by any degree to accommodate different riding styles.” The

inclined pivot axis feature is the novel feature intended to be covered by the claims in this application.

In response to a restriction requirement, the species embodiments shown in Figs. 10-11 were elected for prosecution on the merits. Those embodiments are discussed in paragraphs [0027]-[0028]. In both embodiments, interface member (434) (Fig. 10) or interface member (444) (Fig. 11) pivot around a pivot axis (P) that is substantially perpendicular to handlebar axis (HB) and is substantially parallel to rotational axis (X). As shown in Figs. 10 and 11, rotational axis (X) also is perpendicular to handlebar axis (HB). When rotational axis (X) is vertical, pivot axis (P) likewise will be vertical. In view of the broad statement in the originally-filed application that “the pivot axis (P) could be inclined relative to the handlebar axis (HB) by any degree to accommodate different riding styles,” it should be clear that claim 25 recites a subset of inclinations wherein, when the device is oriented such that the rotational axis (X) is vertical, the pivot axis (P) extends at least in part in a vertical direction.

Claims 1, 13 and 18 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting over claims 1, 8, 18 and 19 of copending application no. 11/389,658 (Appl. ‘658). Additionally, claims 1-8 and 11-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Shahana (EP 1,134,158 A2). Both rejections can be discussed at the same time because both references disclose the prior art device shown in Figs. 1-7 of the present application.

Claim 1 recites “wherein the pivot axis (P) [of the interface member pressed by the rider] is inclined relative to the handlebar mounting axis (HB).” It was submitted that this feature is neither disclosed or suggested anywhere.

According to the examiner, the position of mounting member (103) in Appl. ‘658 or Shahana can be adjusted by rotating or turning mounting sleeve (103A) relative to handlebar (101). When mounting sleeve (103A) is so rotated, then pivot axis (P) will be inclined relative to the handlebar axis (HB). See the last paragraph at page 8 of the final rejection.

The applicant understood the meaning of the examiner’s position as follows: In the device shown in Fig. 3 of Appl. ‘658 or Shahana, a not-shown but well-known fixing bolt normally extends

through the opening in the lower right side surface of mounting sleeve (103A) (shown as an oval opening because of the perspective of Fig. 3) and screws into the facing lower left side of mounting sleeve (103A) in order to tighten mounting sleeve around handlebar (101). It was assumed that the examiner meant that the fixing bolt could be loosened so that mounting sleeve (103A) releases its grip on handlebar (101), and then mounting member (103) can be rotated (turned) coaxially around handlebar (101) (rotated or turned clockwise or counterclockwise in Figs. 4 and 5 in Appl. '658 and Shahana). The examiner agreed with this interpretation in the middle of page 13 of the final rejection.

Given the agreed-upon interpretation, pivot axis (P) in Appl. '658 and Shahana never will become inclined relative to handlebar axis (HB) simply by rotating mounting member (103) coaxially around handlebar (101) as suggested by the examiner. During such rotation, pivot axis (P), which is coaxial with pivot shaft (216) in Figs. 4 and 5 of Appl. '658 and Shahana, will always be parallel to handlebar mounting axis (HB). There is no reason to modify the pivot axis (P) in Appl. '658 or Shahana to be inclined relative to handlebar axis (HB) as required by claim 1.

A persistent problem with this case appears to be that, as stated in the last paragraph at page 19 of the office action, the examiner believes that "the claimed structures and the function they perform are the same as the prior art." However, a comparison of the elected species shown in Figs. 10 and 11, for example, with the embodiment shown in Figs. 1-7 shows that the operation is entirely different from the rider's perspective. In the device shown in Figs. 1-7, a downward sliding motion of the thumb operates interface member (202). In the elected embodiment shown in Fig. 10, the cyclist operates interface member (434) by a rearward and/or lateral sliding motion of the thumb or finger. In the elected embodiment shown in Fig. 11, the cyclist operates interface member (444) by a forward and/or lateral sliding motion of the thumb or finger.

At the penultimate paragraph of page 21 of the final rejection, the examiner takes the position that, since both the claimed device and the prior art move a lever for pulling and releasing a shift control cable, the results of the operation of the species of Figs. 10 and 11 of the present application are predictable and therefore patentable pursuant to *KSR*. The applicant does not broadly claim the pulling and releasing of a shift control cable. The applicant claims a specific configuration of an

interface member such that the rider uses a very different motion of the hand in order to operate the device. Even if it could be said that, once the pivot axis (P) is inclined as claimed, the operation of the claimed device would be predictable, there still must be a reason why one of ordinary skill in the art would want to modify the prior art devices to produce the inclined pivot axis (P) recited in the claims, and this determination must be made without using the teachings of the present application “to accommodate different riding styles” as recited at paragraph [0025] of the application.

Finally, at page 22 of the office action, the examiner takes the position that varying the path of movement of Shahana’s sliding operating body (220) by plus or minus thirty degrees relative to the plane of the ratchet teeth (171) (as stated at paragraph [0017] of Shahana) results in pivot axis (P) being inclined relative to the handlebar axis. Substantial evidence does not support such an allegation. This is best seen from Figs 4 and 5 of Shahana, since those Figures show ratchet teeth plane (T), sliding operating body (220), interface member (202) and pivot shaft (216), wherein pivot shaft (216) defines pivot axis (P) that is perpendicular to the page.

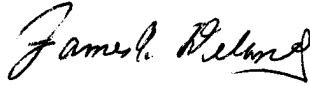
In order to vary the path of movement of sliding operating body (220) by plus or minus thirty degrees relative to ratchet teeth plane (T), sliding operating body (220) would be angled plus or minus thirty degrees relative to ratchet teeth plane (T) in Figs. 4 and 5. There is no need to move interface member (202) or pivot shaft (216) at all. However, even if it were desired to move pivot shaft (216), pivot shaft (216) simply would be moved up or down in Figs. 4 and 5, and pivot shaft (216) (and hence pivot axis (P)) would remain parallel to the handlebar mounting axis (HB). Since sliding operating body (220) simply would be angled up or down in Figs. 4 and 5, there is no reason to angle pivot shaft (216) so that pivot axis (P) is angled relative to the plane of the page (and thereby be inclined relative to handlebar mounting axis (HB)), since such angling of pivot axis (P) would have no benefit, except as discovered by the applicant. There is no suggestion, express or implied, to change the orientation of Shahana’s pivot axis (P).

Accordingly, it is believed that there are clear legal and factual deficiencies in each of the rejections, and it is requested that the panel reverse the nonstatutory obviousness-type double patenting rejection and the rejections under 35 U.S.C. §103 and §112.

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PATENT

Respectfully submitted,

A handwritten signature in cursive script, reading "James A. Deland". The signature is written in dark ink and is positioned above the printed name and registration number.

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